such as it is alone the province of the specialist of the university to collect and promulgate.

Finally it has been assumed that as nothing save advantage can come to those seeking the special knowledge, whether for use or culture, so nothing save advantage can accrue to the university extension system or to the university itself from the adoption of a scheme of evening instruction fairly suited to the needs of the individual student. M. B. SNYDER.

NOTES AND NEWS.

IT will interest cremationists to hear that the Japanese, who some time ago adopted burial of the dead, in imitation of European nations, have reverted, according to the *Indian Medical Gazette*, to their own custom of burning the dead on account of its sanitary recommendations.

— The death of Dr. F. C. Dietrich, keeper of the Botanical Museum at Berlin, is announced. He was eighty-six years of age.

— A despatch to the New York *Tribune*, from Franklin, Ind., Dec. 26, states that Professor Gorby, State Geologist, has given his collection to Franklin College. The collection consists of 40,000 to 60 000 specimens, gathered from almost every State in the Union, and from many foreign countries.

— At the Dec. 10 meeting of the Royal Society, according to *Nature*, the president read from the chair a letter from Professor Dewar, which had been put into his hand as he entered the meeting-room, in which Professor Dewar stated that he had at 3 P.M. that afternoon "placed a quantity of liquid oxygen in the state of rapid ebullition in air (and therefore at a temperature of — 181° C.) between the poles of the historic Faraday magnet in a cup-shaped piece of rock salt (which is not moistened by liquid oxygen and therefore keeps it in the spheroidal state)," and to his surprise, Professor Dewar saw the liquid oxygen, as soon as the magnet was stimulated, "suddenly leap up to the poles and remain there permanently attracted until it evaporated."

— The educated classes of Italy are delighted with the proposed changes at the ancient University of Bologna. The commission appointed by the Government to consider the advisability of making reforms in the old institution has recommended the adoption of the plans of Signor Buriani, the well-known engineer. The cost of the new buildings, which will be an ornament to the city, is estimated at 5,000,000 lire. The philosophical and legal faculties will be housed in future in the old "Archiginnasio," while the School of Mines will occupy the present university building on the Via Zamboni. The library united with the royal and city libraries will be placed in a new palace. Great improvements will be made also in the School of Medicine, which in recent years has suffered somewhat in reputation. The University of Bologna has as grand traditions as any university in the world, and college men in all countries feel an interest in its welfare. It is, in many ways, the mother of universities, and had centuries ago 12,000 students.

— Dr. Langer, says *The Medical Record*, has been investigating the subject of suicide among the soldiers in European armies, his statistics including the years from 1875 to 1887. The largest number of suicides occurred in the Austrian army, averaging 122 a year in each 10,000 soldiers. Next to Austria is Germany, which averaged 63 suicides to every 10,000 soldiers. In the Italian army on the average 40 soldiers in every 10,000 committed suicide every year. The French army from 1872 to 1889 lost in Europe 29 soldiers to every 10,000 annually, and in Algeria it lost just twice as many by suicide. In Belgium there occurred 21, in England 23, in Russia 20, and in Spain 14 to every 10,000. The cause of suicide in the army appears in most cases to be the fear of punishment, though not a few are driven to the act through aversion to military service and despair of ever being able to return to civil life.

— In a paper, read before the Sanitary Convention at Vicksburg, the proceedings of which are published, Dr. Baker of the Michigan State Board of Health gave official statistics and evidence which he summarized as follows: "The record of the great saving of human life and health in Michigan in recent years is one to which, it seems to me, the State and local boards of health in Michigan can justly 'point with pride.' It is a record of the saving of over one hundred lives per year from small-pox, four hundred lives per year saved from death by scarlet fever, and nearly six hundred lives per year saved from death by diphtheria — an aggregate of eleven hundred lives per year, or three lives per day saved from these three diseases. This is a record which we ask to have examined, and which we are willing to have compared with that of the man who 'made two blades of grass grow where only one grew before.'"

— A recent press dispatch states that Superintendent Johnson of the Deaf and Dumb Institute at Indianapolis has been making experiments with the phonograph, and believes that in connection with it he can teach the majority of the deaf-mutes under his charge to talk. He finds that the instrument concentrates the sound at the drum of the ear in such a way that many of the pupils otherwise deaf are enabled to hear. He intends to carry the experiments further, and thinks the phonograph may become a means of teaching the use of their voices to some mutes whose inability to speak is due to the fact that they have never heard speech. He tried the phonograph with 27 boys and 29 girls. Of these, only 3 girls were unable to hear something. Twenty boys and girls could hear instrumental music, while 11 boys and 15 girls could distinguish spoken words. Of the 56 whose hearing was tested, 28 could hear better with the left ear and 14 with the right, while 11 heard alike in both.

— It is much to be feared that, after all the stir which has been made about it, the Antarctic expedition which was to have been sent out next year, at the joint expense of the Australian colonies and Baron Oscar Dickson of Gothenburg, may have to be dropped owing to the supineness of the Australians. In July last it was announced that the Queensland Government was to place £2,000 in the colonial estimates as a contribution to the expedition. Sir Henry Parkes undertook to get £2.000 from New South Wales, while from Victoria a sum was expected commensurate with the importance of that colony. Sir Thomas Elder also promised £5,000 on certain conditions, while Baron Oscar Dickson undertook to give another £5,000, and, indeed, was quite prepared to spend double that amount to insure that the expedition should be a success. What with cash and promises, the sum of £14 000 seemed secure in July last, and it was confidently expected that £2.000 should be raised, so as to be well over the £15,000 which it was calculated the expedition would cost. Baron Nordenskjold was quite prepared to take charge of the expedition; and, as stated in the London *Times*. Baron Dickson had actually selected the two ships which he thought suitable for the work. Now we learn that the Queensland Parliament has refused to pass the vote of £2,000 which was placed upon the estimates. It is not only the direct loss of this subscription which is to be deplored, but it affects the other promises, which were made conditionally. Baron Dickson's offer of £5,000 lapses at the end of this month, and as he has had no information from Australia that the remainder of the £15,000 is secured, he has probably made up his mind that the whole scheme has fallen through, as did the similar proposal a few years ago. Indeed, it would seem as if Baron Dickson had not been treated with the courtesy which might have been expected. He had not been informed of the progress of matters in Australia, and has received no certain information as to the actual state of the movement. The fact is, the movement seemes to have been sadly mismanaged. No proper steps have been taken to enlist the sympathies and the active support of the public in Australia, where there is plenty of money to spare for purposes of this kind. True, one or two newspapers appear to have supported the proposal with some energy, but much more is wanted than that in Australia, where evidently the public is not too enthusiastic for the promotion of knowledge. The leaders of the movement on behalf of the proposed Antarctic expedition seem to have been a few members of learned societies, not quite in touch with the general public. The result is that the wealthy Australian colonies have been placed in the ridiculous position of having appealed to a small nation like Sweden for assistance, and in the end have

been unable to fulfil the conditions on which that assistance was asked. It is to be hoped that it is not yet too late to lead the movement to a more worthy result.

— The *Telegram Herald* of Grand Rapids says that the tallest men of Western Europe are found in Catalonia, Spain; Normandy, France; Yorkshire, England; and the Ardennes districts of Belgium. Prussia gets her tallest recruits from Schleswig-Holstein, the original home of the irrepressible Anglo-Saxons; Austria from the Tyrolese highlands. In Italy the progress of physical degeneration has extended to the upper Appennines, but the Albanian Turks are still an athletic race, and the natives of the Caucasus are as sinewy and gaunt as in the days of the Argonauts. In the United States the thirty-eighth parallel, ranging through Indiana and northern Kentucky, is as decidedly the latitude of big men as the forty-second is that of big cities. The tallest men of South America are found in the western provinces of the Argentine Republic, of Asia in Afghanistan and Kaypooana, of Africa in the highlands of Abyssinia.

— A correspondent of the *Times of India*, referring to recent long fasts in this country, says that in India fasts of thirty to forty days are common among the Jains, from among whom, once in each year, some individual comes forward and undertakes to fast thirty-five, forty, and even sixty days. They do this with nothing but warm water to drink, and will die rather than take food during the prescribed period. Quite recently two Jains of Bombay fasted, one for sixty-one, the other for forty-eight days, at the end of which time, having been congratulated by twenty-five thousand Jains who went for the purpose, they recommenced taking food in the manner prescribed in their own books and shastras. On Sept. 22, in commemoration of this event, all the chief bazaars in Bombay were closed, and about five thousand Jains, male and female, fasted all day, while a large sum was spent in securing the release of cows and other animals from the slaughter house at Bandora.

— At a meeting of the Chemical Society of Washington, Dec. 10, Professor Wiley and W. H. Krug presented papers on the "So-called Floridite." Professor Wiley described the location and the occurrence in Florida of the samples which had been sent him by Professor Cox. Some of the specimens, he said, were amorphous masses of almost pure tri-calcium phosphate, others were mixtures, but containing chiefly that compound. He thought it ought not to be defined as a mineral species. He said undue importance had probably been ascribed to commercial fertilizers as plant foods, as experience has demonstrated that mineral phosphates are not readily absorbed by plants even when in a finely divided state, but need to be decomposed by the action of sulphuric acid. The most refractory phosphates, however, with plenty of time are utilized by the plants. Florida phosphates seemed especially capable of assimilation in the natural state, and experiments in the use of the natural product were now going on at the sugar station of Runymede, Florida. Mr. Krug spoke of the methods of analysis, gave details of the process as described at a previous meeting, and presented the results of the analyses (Dr. T. M. Chatard, "Notes on the Analyses of phosphate rocks"). He agreed with Professor Wiley as to the non-existence of floridite as a definite species. His paper referred mainly to the determination of fluorine in phosphate rocks, and the method employed is a modification of the Boezelius silica fusion method. Instead of using ammonium carbonate to remove silica and alumina from the alkaline solution, the saturation of the solution with carbonic acid under pressure has been found to give very satisfactory results. He had reason to think that the method might be still further simplified. Discussion of the two papers was by Professor Clarke and Dr. Schneider. Professor Clarke thought the determination of a mineral species did not depend upon crystallization, as many amorphous minerals, such as torquois, serpentine, and talc were good species Whether it is a distinct chemical compound, is the best basis of determination. If among the phosphates is found a tri-calcium phosphate by itself, he thought it ought to be a mineral species, no matter what its derivation. Dr. Schneider described a series of analyses he had made to determine the influence of different quantities of fluorine on the loss of silica when evaporated with varying amounts of liquid. In a paper on "Meat Preservatives," I. T. Davis gave the following list of preservative agents: salt, potassium nitrate, sulphurous acid, benzoic acid, saccharine, salycilic acid, hydro-napthole. The author described their action and the means of their detection. W. F. Hillebrand and Wm. H. Melville presented a paper "On the Isomorphism and Composition of Thorium and Uranous Sulphates."

— A meeting was held in the Lecture Room of the Brooklyn Institute, 502 Fulton Street, on Saturday evening, Dec. 26, at eight o'clock, for the purpose of organizing a Brooklyn Numismatical Society as a Section of the Brooklyn Institute. The purposes of the society will be the collection of coins, medallions, and kindred works of art, the conduct of courses of lectures on numismatics, the formation of a library of reference on the subject, and to enable students and specialists in numismatology to become better acquainted with one another. Dr. Charles E. West, president of the Archæological Society of the Institute, gave a brief illustrated lecture on "Ancient Coinage" after the organization of the section.

— In the interesting paper on insectivorous plants, read before the Royal Horticultural Society on Sept. 22, 1891, and reported in *Nature*, Mr. R. Lindsay refers to the experiments by which Mr. Francis Darwin has shown the amount of benefit accruing to insectivorous plants from nitrogenous food. Mr. Lindsay says his own experience in the culture of Dionæa is that when two sets of plants are grown side by side under the same conditions in every respect, except that insects are excluded from the one and admitted to the other, the latter, or fed plants, are found to be stronger and far superior to the former during the following season. He points out the importance of remembering that the natural conditions under which these plants are found are different from what they are under cultivation. In their native habitats they grow in very poor soil and make feeble roots, and under these conditions may require to capture more insects by their leaves to make up for their root deficiency. Under culture, however, fairly good roots for the size of plant are developed. "Darwin," says Mr. Lindsay, "mentions that the roots of Dionæa are very small: those of a moderately fine plant which he examined consisted of two branches, about one inch in length, springing from a bulbous enlargement. I have frequently found Dionæa roots six inches in length; but they are deciduous, and I can only conjecture that the roots mentioned by Darwin were not fully grown at the time they were measured. What is here stated of the natural habits of Dionæa applies more or less to all insectivorous plants."

— At a recent meeting of the New York Academy of Medicine a popular address was delivered by Professor Charles F. Chandler on "Arsenic in Common Life." In this address, as reported in *Medical News*, he devoted himself to the task of exploding the widely prevalent idea, both in lay and professional circles, concerning the dangers from arsenic in wall-paper. He said that he had himself believed in it without ever making any special investigation, up to the time when his duties in connection with the Board of Health required him to make it a special study. He then found that the idea had been started by a botanist, and that it was based on the most flimsy reasoning. He next made some experiments in the laboratory by passing air over sheets of paper —some moist and others dry—coated with Paris green. Not a trace of arsenic was found in this air. Much of his address was devoted to a narration of cases that had occurred in Boston during a time when the people in that city were much excited over the supposed dangers from arsenical wall-paper. The most important case was that of an ex-mayor of Boston, who had been supposed to be suffering for a long time from this form of poisoning, but the post-mortem examination showed that he had died from cancer of the stomach. The wall-paper that had been supposed to be the source of the poisoning in his case had not been changed from 1817 to 1891. While it is quite possible that, in the old-fashioned wall-paper, the arsenical dyes were loosely attached to the paper, the arsenic might become detached and diffused through the air, the amount would ordinarily be quite insignificant; and in the wall-papers made in the last fifteen years no arsenical pigments have been used, and the presence of arsenic in

these papers, as determined by delicate chemical tests, is due entirely to accidental impurities. Some of the papers that were thought to have caused poisoning had been on the walls for thirty or forty years. Supposing, for the sake of argument, that there were sixty square yards of paper in a room, each yard containing one grain of arsenic—the amount found in several of the cases quoted—and that during a period of thirty years *all* the arsenic had left the wall-paper and had entered the human system without any being lost, this would be at the rate of one grain in six months, or only $\frac{1}{180}$ of a grain in each twenty-four hours. Many distinguished scientists have independently investigated this subject of poisoning from arsenical wall-paper, and they all agree in saying that there is "nothing in it."

— The *Meteorologische Zeitschrift* for November contains a summary, by Dr. J. Hann, of the meteorological observations taken at Cairo from 1868–88. The observations have been published *in extenso*, together with a good introduction upon the climate, in the Bulletin of the Egyptian Institute, and although similar observations have occasionally been published before, the present series contains much new and useful material. The most striking feature in the climate of this part of Egypt, as we learn from *Nature*, is the *Chamsin*, the hot and dust-bearing wind which makes its appearance in March or April for about three to four days at a time, and robs a large portion of the trees of their leaves. In the intervals during which this wind is not blowing the weather is pleasant and clear during spring-time, and the nights fresh and calm. During the summer the north winds prevail, with high temperature, very clear air, and great dryness. Towards September humidity appears with the rise of the Nile, the ground is at times covered with heavy dew, and the heat becomes oppressive on account of the moisture. In October and November fog occasionally occurs in the morning, and rain begins to fall. After this season the temperature is uniform and pleasant. Snow is unknown, frost very seldom occurs, and rain is not very frequent. The absolute maximum temperature of the 21 years' period was 117° in August, 1881, which was also closely approached in May, 1880, viz., 116.4°. The absolute minimum was 28.4° in February, 1880, and the mean annual temperature was 70.5°. Rainfall is only given for the years 1887–88, in which 0 87 and 1.67 inches fell respectively. The relative humidity sinks at times even on a daily average to 12 per cent, and has been known to fall as low as 3 per cent at certain hours. Thunder-storms and hail are very rare. The original work contains a long investigation on the connection between the height of the Nile and the weather, a comparison between the present climate and that at the beginning of this century, and several carefully prepared diagrams referring to all meteorological elements.

— At the monthly meeting of the Royal Meteorological Society, Dec. 16, Mr. W. Marriott gave the results of the investigation undertaken by the society into the thunder-storms of 1888 and 1889, which he illustrated by a number of lantern slides. The investigation was originally confined to the south-east of England, but as this district was found to be too circumscribed, it became necessary to include the whole of England and Wales. After describing the arrangements for collecting the observations and the methods adopted for their discussion, Mr. Marriott gave statistics showing the number of days on which thunder-storms occurred at each station; the number of days of thunder-storms in each month for the whole country; the number of days on which it was reported that damage or accidents from lightning occurred; and also the number of days on which hail accompanied the thunder-storms. In 1888 there were 113 days and in 1889 123 days on which thunder-storms occurred in some part of the country. The number of days with damage by lightning was 33 in 1888 and 38 in 1889; and there were 56 days in each year on which hail accompanied the thunder-storms. The tables of hourly frequency show that thunder-storms are most frequent between noon and 4 P.M., and least frequent between 1 A.M. and 7 A.M. Thunder-storms appear to travel at an average rate of about 18 miles per hour in ill-defined low barometric pressure systems, but at a higher rate in squally conditions. The author is of opinion that individual thunder-storms do not travel more than about 20 miles; and that they take the path of least resistance, and are consequently most frequent on flat and low ground. Detailed isobaric charts, with isobars for two-hundredths of an inch were prepared for 9 A.M. and 9 P.M. each day for the month of June, 1888. An examination of these charts showed that instead of the pressure being so very ill-defined, as appeared on the daily weather charts, there are frequently a number of small, but distinct areas of low pressure, or cyclones, with regular wind circulation; and that these small cyclones passed over the districts from which thunder-storms were reported. Sometimes it is not possible to make out well-formed areas of low pressure from two-hundredths of an inch isobars, but there is a deflection of the wind which shows that there is some disturbing cause; and thunder-storms have usually occurred in that immediate neighborhood. The author believes that the thunder-storm formations are small atmospheric whirls, in all respects like ordinary cyclones; and that the whirl may vary from 1 mile to 10 miles or more in diameter. There are frequently several whirls near together, or following one another along the same track. The numerous oscillations in the barometric curve are evidently due to the passage of a succession of atmospheric whirls; and it appears that lightning-strokes are most frequent when these oscillations are numerous. Mr. F. J. Brodie read a paper "On the Prevalence of Fog in London during the Twenty Years 1871 to 1890." The popular notion that November is *par excellence* a month of fog is not confirmed by the figures given by the author. The number of fogs in that month is, if anything, slightly less than in October or January, and decidedly less than in December, the last-mentioned month being certainly the worst of the whole year. The latter part of the winter is not only less foggy than the earlier part, but is clearer than the autumn months. In February the average number of days with fog is only 6.6, as against 8.9 in January, 10.2 in December, 9 2 in October, and 8.8 in November.

— A paper on "Siouan Onomatopes," by J. Owen Dorsey, was read before the Anthropological Society of Washington, D.C., Dec. 1, 1891. According to "The Century Dictionary," "an onomatope is a word formed to resemble the sound made by the thing signified." Mr. Dorsey finds in the Siouan languages many onomatopetic roots, hence he suggests the modification of the definition just given, making it read, "An onomatope is a word *or root* formed to resemble the sound made by the thing signified" In the paper under consideration, the author gives examples of onomatopes in seven languages of the Siouan or Dakotan family: Dhegiha, Kwapa, Kansa, Osage, Tciwere, Winnebago, and Dakota, all but the Dakota having been collected by himself since 1871. In these languages, according to the author, there are sundry permutations of sound, among which are *sh* and *kh*, *gh* and *z*, *dh* and *n*. The words in which these permutations occur are not always synonyms; but when we find a word in which, for example, *sh* is used, we may safely infer that the language contains another word differing from the former only in the substitution of *kh* for *sh*, or that one language or dialect uses *sh* where another employs its correlative, *kh*. Most of the onomatopes found by the author are dissyllabic, a few being monosyllabic and polysyllabic. Some of the onomatopes were given with the notations of their respective sounds as they appear to the Indian ear; thus, the sound of the plane and drawing-knife (*s-s-s*) becomes the root *s'u*; whence the verbs, *ba-s'u*, to use a plane; and *dhi-s'u*, to use a drawing-knife. The sound of a waterfall, of sawing wood, etc., is *kh* + (a prolonged sound), the onomatope being *khu'-'e* in Dhegiha, *khu'-wa-d^{ah}e* in Kansa, *khu'-we* in Kansa and Osage, *kho'-kh'e* in Tciwere, and *sho* + *kh* in Winnebago (the *o* in the last being prolonged). The creaking of new shoes or the sound of fiddle-strings (*gi-gi-gi*) evidently suggested the root *gi'-ze;* whence *ba-gi'ze*, to play a fiddle; and *nan-gi'ze*, to make (new shoes) creak by walking (in them). Many other examples were given; but the reader is referred to the *American Anthropologist* for January, 1892, for the full article.

— Among the recent appointments of Johns Hopkins graduates are Alfred Bagby, Jun. (Ph.D., 1891), adjunct professor of ancient languages, South Carolina College; Edward A. Bechtel (A.B, 1888), professor of Latin, Yankton College, South Da-

kota; Hiram H. Bice (A.B., 1889), instructor of languages, Blackburn University, Carlinville, Ill.; Richard N. Brackett (Ph.D., 1887), associate professor of chemistry, Clemson Agricultural College, S.C.; J. Douglas Bruce (graduate student, 1889–90), associate in Anglo-Saxon and Middle English, Bryn Mawr College; Norman W. Cary (graduate student, 1889–91), instructor in biology, geology, and astronomy, Wilson College, Chambersburg, Pa.; Frank A. Christie (fellow, 1885–86), lecturer on New Testament literature, Harvard Divinity School; Henry L. Coar (graduate student, 1884–86), mathematical master, Smith Academy, Washington University, Mo.; Charles Edward Coates, Jun. (A.B., 1887, Ph D., 1891), professor of chemistry, St. John's College, Md.; John R. Commons (graduate student, 1888–90), associate professor of political economy, Oberlin College; Starr W. Cutting (graduate student, 1890–91), professor of French and German, Earlham College; L. Bradley Dorr (A.B., 1890), adjunct professor of chemistry, Niagara University, Buffalo, N.Y.; Hermann L. Ebeling (A.B., 1882, fellow, 1890, Ph.D., 1891), professor of Greek, Miami University; William A. Eckles (graduate student, 1889–91), professor of Greek, Ripon College; George S. Ely (fellow, 1881–83, Ph.D., 1883), principal examiner, U. S. Patent Office; Alfred Emerson (fellow, 1882–84, instructor, 1884–85), associate professor of classical archæology, Cornell University; Andrew Fossum (Ph.D., 1887), classical instructor, Drisler school, New York City; William R. Fraser (graduate student, 1888–91), instructor in classics, University of Nebraska; Thomas P. Harrison (fellow, 1890-91, Ph.D, 1891) associate professor of English, Clemson Agricultural College, S.C; Arthur S. Hathaway (fellow, 1882–83), professor of mathematics, Rose Polytechnic Institute; George A. Hench (fellow, 1888–89, Ph.D., 1889), assistant professor of Germanic philology, University of Michigan; Charles C. Henschen, (graduate student, 1890–91), instructor in Girard College, Philadelphia; Benjamin C. Hinde (graduate student, 1888–90), professor of physics, Trinity College, N.C.; Clifton F. Hodge (fellow, 1888–89, Ph.D., 1889), instructor of biology, University of Wisconsin; Walter J. Jones (A.B., 1888, Ph.D., 1891), professor of chemistry, Wittenberg College, O.; Henry W. Keating (A.B., 1891), principal, Centreville Academy, Md.; Andrew C. Lawson (fellow, 1886–87, Ph.D., 1888), assistant professor of geology and mineralogy, University of California; Frederick S. Lee (fellow, 1884–85, Ph.D., 1885), demonstrator of physiology, College of Physicians and Surgeons, N.Y.; Felix Lengfeld (fellow, 1887–88, Ph.D., 1888), instructor in chemistry, University of California; A. Stanley Mackenzie (fellow, 1890–91), lecturer in physics, Bryn Mawr College; Arthur W. McDougall (A.B., 1891), financial secretary, Associated Charities of Cincinnati; John H. T. McPherson (A.B., 1886, fellow, 1889–90, Ph.D., 1890), professor of history, University of Georgia; W. Howard Miller (A.B., 1888), instructor in mathematics, Leland Stanford University; Thomas H. Morgan (fellow, 1889–90, Ph.D., 1890, Bruce fellow, 1890–91), associate professor of biology, Bryn Mawr College; Wilfred P. Mustard (fellow, 1890-91, Ph.D., 1891), professor of Latin, Colorado College; Charles A. Perkins (fellow, 1883–84, Ph.D., 1884), professor of physics, Hampden Sidney College; E. D. Preston (fellow, 1876–78), is engaged at Honolulu, probably for a year, working under the joint auspices of the International Geodetic Association of Europe and the U. S. Coast and Geodetic Survey; Herbert E. Russell (graduate student, 1886–87), associate professor of mathematics and natural sciences, University of Denver; A. Duncan Savage (fellow, 1876–79), instructor in the history of art, Farmington, Conn.; Edward M. Schaeffer (graduate student, 1883–85), professor of physical culture, Washington and Lee University; Henry Sewall (fellow, 1878–79, associate, 1879–82, Ph.D., 1879), professor of physiology, University of Denver; Sidney Sherwood (Ph.D., 1891), instructor in finance, University of Pennsylvania; Ernest G. Sihler (fellow, 1876–79, Ph.D., 1878), professor of ancient languages, Concordia College, Milwaukee; Henry D. Thompson (fellow, 1886–87), assistant professor of mathematics, Princeton College; William L. Weber (graduate student, 1890–91), professor of English, Southwestern University, Texas; Benjamin W. Wells (fellow, 1881), professor of modern languages, University of the South; John White, Jun. (A.B., 1888, fellow, 1890–91, Ph.D., 1891), assistant in chemistry, Cornell University; Henry V. Wilson (A.B., 1883, fellow, 1887–88, Ph.D., 1888, Bruce fellow, 1888–89), professor of biology, University of North Carolina; Edmund B. Wilson (fellow, 1879–80, Ph.D., 1881, assistant, 1881–82), adjunct professor of biology, Columbia College; John R. Wightman (fellow, 1886–87, Ph.D., 1888), associate professor of romance languages, University of Nebraska; Arthur C. Wightman (fellow, 1887–88, Ph.D., 1889, demonstrator, 1889–90), assistant professor of biology, Randolph Macon College.

— Professor Stas, the eminent Belgian chemist, has died at the age of seventy-eight.

— According to information sent to Berlin, says the *Times*, Emin Pasha and Dr. Stuhlmann, travelling in the region between Lakes Victoria, Tanganyika, and Albert Edward, have discovered what they take to be the ultimate source of the Nile. This is a river called Kifu, which is supposed to have its sources in the Uhha country, lying to the east of the northern part of Lake Tanganyika, about 4° of south latitude. It flows into the southern end of Lake Albert Edward. It is not stated that Emin and Dr. Stuhlmann have actually followed the course of the river. They have no doubt encountered it on their journey from Victoria Nyanza towards the other lake and followed it down to its mouth. If the course which they lay down for it is correct, it will compel us to alter the hydrography on our maps of this region. There is no mention of the Lake Kifu, between Tanganyika and Albert Edward, to be found in existing maps; and it is well known that the African natives rarely distinguish between a river and a lake,—Nyanza, in the language of Central Africa, standing for both. The still larger lake, Akanyaru, or Alexandra Nyanza, as Mr. Stanley named it, may very probably also have to be removed. No white traveller, so far as is known, has ever seen it; Mr Stanley placed it down on his map from native report. It may simply be an expansion of the Kifu, and not the source of the Kagera, which flows into the west side of Victoria Nyanza. The Kagera will thus lose much of its importance as a remote feeder of the Nile, and the Kifu may possibly become its most southerly source. But it should be remembered that when Mr. Stanley was marching northwards to the Victoria Nyanza in his great journey across Africa, he came upon a river in about 5° south latitude which he believed flowed into the south shore of the lake under the name of Shimeeyu. Mr. Stanley struck this river at only one or two points, and these may really have belonged to different rivers. At all events, on the most recent maps the Shimeeyu is sharply deflected to the east from its mouth in the lake, and there is no river rising in 5° south latitude, which flows into the Victoria Nyanza. Probably we have not heard the last word about the ultimate sources of this strange river, about the position of which Ptolemy, after all, was not so far wrong. We have first the Kifu rising in about 4° south latitude, running into Lake Albert Edward, issuing thence as the Semliki, and feeding Lake Albert. There it mingles with the Victoria Nile from Lake Victoria, and together they issue from Lake Albert as the White Nile, which, before it reaches Khartoum, is augmented by a multitude of tributaries from the west. Whether the Shimeeyu or the Kifu be its most remote southern feeder, the river flows through 36 degrees of latitude. The full details of this journey of Emin will be awaited with interest, especially if he continues to fill in the blanks on our maps and to complete our knowlege of one of the most remarkable rivers of the world.

— Professor Thomas F. Hunt of the Pennsylvania State College has accepted the invitation to occupy the chair of agriculture in the Ohio State University after Jan. 1, 1892.

— Dr. E. von Esmarch, son of Professor v. Esmarch of Kiel, has been appointed professor of hygiene in the University of Königsberg, in the room of Professor C. Fränkel, who has gone to Marburg.

— Mr. Robert P. Bigelow (S B., Harvard University, 1887) has been appointed to the Adam T. Bruce fellowship in biology, in place of Dr. Thomas H. Morgan, who has resigned the fellowship to accept the position of associate professor of biology at Bryn Mawn College.